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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,474	07/29/2003	Kevin Smathers	100204025-1	7299

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EXAMINER	
WILSON, ROBERT W	
ART UNIT	**PAPER NUMBER**
2619	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/629,474	SMATHERS, KEVIN	
	Examiner	Art Unit	
	Robert W. Wilson	2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 August 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,5,6,8,10,11,13,15,16,18,20,21,23,25,26,28 and 30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1,3,5,6,8,10,16,18,20,21,23 and 25* is/are allowed.

6)☒ Claim(s) *11,13,15,26,28, & 30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 11, 13, & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choi (U.S. Patent Pub. No.: US2003/0227930) in view of Poggio (U.S. Patent Pub. No.: US2003/0037154)

Referring to claim 11, Choi teaches a processor-implemented method ((Fig 2 performs the method)

Initiating a data connection between a first processor arrangement and a second processor arrangement that are coupled via a network (a data connection is initiated by sending the frame shown in Fig 8 (1) from the first inherent processor arrangement on the local network shown to 2nd processor arrangement which is inherently on the Internet which is coupled via the local network)

Choosing a selected transport identifier for the first processor arrangement the selected transport identifier identifying the data connection between the first and second processor arrangement (A local source port of 0x100c or transport identifier was selected per Fig 8 (1) & (2) respectively) the selected transport identifier identifying the data connection between the first and second processor arrangement (The local source port of 0x100c or transport identifier per Fig 8 (1) & (2) identifies the data connection between the first and second processor arrangement.)

Searching a collection of unique identifier for a match to the selected transport identifier wherein each unique identifier include a transport identifier and network a identifier and is associated with an existing data connect of the first processor arrangement (The applicant broadly claims unique identifier. The examiner interprets a unique identifier as a combination of IP address and TCP port numbers which are not local but uniquely known and used on the Internet. The reference teaches that IP address and the source address are searched through a table which determined that a source port address is a local address and therefore does not uniquely match the internet source port per Fig 8)

If no unique identifier of the connection has a transport identifier that matches the selected transport identifier and a network identifier that matches the network identifier of the transport

identifier that matches the selected transport identifier and a network identifier that matches a network identifier the second processor arrangement then allocating a transport identifier to the data connection forming a new unique identifier form the selected transport identifier and a network identifier of the second processor arrangement and adding the new unique identifier to the connection (The reference teaches that IP address and the source address are searched through a table which determined that a source port address is a local address and therefore does not uniquely match the internet source port per Fig 8. The source port or transport identifier changed to a new transport identifier 0x2000 per Fig 8 (3) (4) which now is a unique internet identifier and the source port identifier is now added to the packet)

wherein the data connection comprises a transmission control protocol (TCP) connection (IP addresses are inherently a part of TCP per Fig 8)

Choi does not expressly call for: wherein the network identifier of the remote computing device comprises a range of TCP sequence number of the data connections

Poggio teaches: wherein the network identifier of the remote computing device comprises a range of TCP sequence number of the data connections (The header includes a range of acceptable TCP sequence numbers per Pg 4 Para [0051]

It would have been obvious to add the wherein the network identifier of the remote computing device comprises a range of TCP sequence number of the data connections or Poggio to the header of Choi in order to insure that packets which are outside the stream window are rejected in order to improve the performance.

In Addition Choi teaches:

Regarding claim 13, wherein the selected transport identifier comprises a TCP port (SRC port is a TCP port per Fig 8)

Regarding claim 15, wherein the network identifier comprises an internet protocol address of the second processor (destination IP address per Fig 8 or second processor)

3. Claims 26, 28, & 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Chang (U.S. Patent No.: 6,338,078) in view of Attanasio (U.S. Patent No.: 5,371,852) further in

view of Bal (U.S. Patent No.: 6,691,168)

Referring to claim 26, Chang teaches system comprising (The server and clients per Fig 2 or system) comprising:

Network means for providing a plurality of data connections between a first processing arrangement and a plurality of processing arrangements (Network1 per Fig 2 or network means for providing data connections between the server or first processing arrangement and the clients and router shown in Figure 2 or plurality of processing arrangement) wherein each unique identifier includes a network identifier and a transport identifier dynamically allocated of the first processor arrangement (Each socket connection per Fig 2 has a unique TCP port and IP address per Fig 4 which is inherently dynamically allocated for the server or first processor arrangement)

Data storage means for storing respective unique identifier associated with the plurality of data connections wherein each unique identifier includes a network identifier and transport identifier dynamically allocated (The server, client, and router of Figure 2 are represented by the architecture of Fig 1 and RAM and ROM per Fig 1 are the data storage means for storing the TCP port number and TCP addresses per Fig 4)

Processor means for allocating the transport identifier for the first data processing arrangement (The Server per Fig 1 is the first data processing arrangement and the server has a CPU or processor means per Fig 1 for storing port numbers or transport identifier per Fig 4)

wherein the data connection comprise transmission control protocol/Internet Control protocol (TCP/IP) connections (TCP sockets per Fig 2 or TCP connections)

Chang does not expressly call for: wherein the network identifier comprises a range of TCP sequence number of the data connections or transport identifier allocated from a set reserved identifier or allocating duplicate transport identifier for two or more of the plurality of data connections if the unique identifier of the two or more data connections include different network identifier

Poggio teaches: wherein the network identifier of the remote computing device comprises a range of TCP sequence number of the data connections (The header includes a range of acceptable TCP sequence numbers per Pg 4 Para [0051]

It would have been obvious to add the wherein the network identifier of the remote computing device comprises a range of TCP sequence number of the data connections of Poggio to the header of Chang in order to insure that packets which are outside the stream window are rejected in order to improve the performance.

The combination of Chang & Poggio does not expressly call for: transport identifier allocated from a set reserved identifier

Bal teaches: transport identifier allocated from a set reserved identifier per col. 12 line 41 to col. 13 line 15

It would have been obvious to one of ordinary skill in the art at the time of the invention to add the transport identifier allocated from a set reserved identifier of Bal to the port identifier or transport identifier processing of Chang & Poggio in order to build a system which is standard compliant that will interoperate with internet legacy systems.

The combination of Chang, Poggio, and Bal do not expressly call for: allocating duplicate transport identifier for two or more of the plurality of data connections if the unique identifier of the two or more data connections include different network identifier

Attanasio teaches: allocating duplicate transport identifier for two or more of the plurality of data connections if the unique identifier of the two or more data connections include different network identifier per col. 10 lines 51 to 63

It would have been obvious to one of ordinary skill in the art at the time of the invention to add allocating duplicate transport identifier for two or more of the plurality of data connections if the unique identifier of the two or more data connections include different network identifier of Attanasio to the processing of port numbers and IP addresses of the combination of Chang, Poggio and Bal in order to build a system which can reused TCP port numbers and therefore never run out of TCP port numbers.

In addition Chang teaches:

Regarding claim 28, wherein the dynamic transport identifier comprise TCP ports (TCP port Number per Fig 4)

Regarding claim 30, the network identifier comprise respective IP address of the plurality of processing arrangement (The network identifier comprises the IP address as shown in Fig 4 which is the address of the server, client, and router per Fig 2 or plurality of processing arrangement).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 11, 13, & 15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Referring to claim 11, what is meant by the network identifier of the remote computing device. There is not antecedent basis for the remote computing device.

Allowable Subject Matter

6. Claims 1,3,5-6, 8, 10, 16, 18, 20-21, 23, 25 are allowed. The following is an Examiner's statement of reasons for allowance: Claims 1,3,5-6, 8, 10, 16, 18, 20-21, 23, 25 are considered allowable since when reading the claims in light of the specification, no prior art references alone or in combination disclose or suggest the combination of limitations specified in the independent claims including:

"wherein permitting association of duplicate dynamic transport identifier for two or more of the data connections promises determining that respective ranges of TCP sequence number of the two or more data connections are different, as specified in claims 1, 6, 16, & 21.

Response to Amendment

7. Applicant's arguments with respect to claims 1,3,5-6,8,10-11, 13, 15-16, 18, 20-21, 23, 25-26, 28, & 30 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W. Wilson whose telephone number is 571/272-3075. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571/272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert W. Wilson

Robert W Wilson
Examiner
Art Unit 2619

RWW
10/9/07